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EXAMINER
FINDLEY, CHRISTOPHER G

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/702,557	SEO ET AL.
	Examiner	Art Unit	
	CHRISTOPHER FINDLEY	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 October 2008</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30 and 32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30 and 32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>7/22/2008, 8/05/2008, 9/04/2008, 10/09/2008, 10/29/2008, 12/31/2008</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 10/09/2008 have been fully considered but they are
not persuasive.

2.   Re claim 1, the Applicant contends that Kaneshige does not disclose a playlist
area for storing playlist files. The Examiner respectfully notes that the claim language
disputed by the Applicant was not previously presented. However, the Examiner also
respectfully disagrees with the Applicant's assertion. In view of the amended claims,
the Examiner directs the Applicant to the program chain information PGCI disclosed by
Kaneshige (Kaneshige: Fig. 28, corresponding to the program chain information table of
Fig. 26) as teaching the playlist claimed. Kaneshige states that the program chain
information includes program chain general information, a program chain command
table, and cell playback information, wherein the program chain general information
further describes the number of programs and the number of cells for each program
chain (Kaneshige: column 16, lines 21-33). Accordingly, the Examiner now directs the
Applicant to the video title set cell address table VTS_C_ADT as teaching the clip
information files (Kaneshige: Fig. 26, VTS_C_ADT). Kaneshige discloses that the video
title set cell address table VTS_C_ADT is a video title set cell address table, in which
cell address information is described (Kaneshige: column 15, lines 60-61).

3.   Re claim 1, the Applicant also contends that Kaneshige does not disclose that
the clip information file, the playlist file, and the stream file are logically separate.
However, the Examiner respectfully disagrees. Kaneshige illustrates in Fig. 26 that the

video title set is divided into sections, wherein the video title set information section

VTSI is separate from the video object set VTSTT_VOBS and the video title set

information section VTSI is further divided into sections which include a video title set

cell address table VTS_C_ADT separate from a video title set program chain

information table VTS_PGCIT (Kaneshige: Fig. 26).

4.   Re claim 1, the Applicant also contends that Kaneshige does not disclose clip

information files, wherein each one of the clip information files is associated with each

stream file. However, the Examiner respectfully disagrees. The video title set cell

address table VTS_C_ADT is a video title set cell address table, in which cell address

information is described (Kaneshige: column 15, lines 60-61). Since the program chain

controls playback by mapping the cells to be played in a program (Kaneshige: column

16, lines 28-30), the cell addresses described by the video title set cell address table

VTS_C_ADT correspond to each stream file (i.e., cell) in the program.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed
> publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6.   Claims 1-3, and 12-19, 22, 25, 28, and 32 are rejected under 35 U.S.C. 102(a)

as being anticipated by Kaneshige et al. (US 6360055 B1).

Re **claim 1**, Kaneshige discloses a reproducing apparatus that both records

video data onto and reproduces video data from a computer readable medium having a

data structure for managing reproduction of video data having at least one reproduction

path video data recorded on the recording medium (Kaneshige: column 1, line 61,

through column 2, line 7), comprising: a data area for storing stream files (Kaneshige:

Fig. 26, video object set for video title set menu VTSTT_VOBS), each stream file

including video data (Kaneshige: Fig. 26, _video_ object set for video title set menu

VTSTT_VOBS), each stream file associated with one of a portion common to the

reproduction paths and a particular reproduction path among the reproduction paths of

the video data (Kaneshige: Figs. 9A and 9B); a playlist area for storing a playlist file, the

playlist file for identifying the common reproduction path portions and the particular

reproduction path to reproduce (Kaneshige: Figs. 26 and 28, program chain information

PGCI; column 16, lines 21-33); and a clip information area for storing management

information for managing reproduction of the video data (Kaneshige: Fig. 26, video title

set information section VTSI is further divided into sections which include a video title

set cell address table VTS_C_ADT), the management information including clip

information files (Kaneshige: column 15, lines 60-61, the video title set cell address

table VTS_C_ADT is a video title set cell address table, in which cell address

information is described), each one of the clip information files being associated with a

corresponding stream file (Kaneshige: column 15, lines 60-61, the video title set cell

address table VTS_C_ADT is a video title set cell address table, in which cell address

information is described; column 16, lines 28-30, since the program chain controls

playback by mapping the cells to be played in a program, the cell addresses described

by the video title set cell address table VTS_C_ADT correspond to each stream file (i.e.,

cell) in the program), each clip information file for providing a map for the associated

stream file (Kaneshige: Fig. 28; column 16, lines 21-27), each map for mapping

presentation time information to address information for the associated stream file

(Kaneshige: Fig. 28; column 16, line 21, through column 17, line 13; Fig. 28, cell

playback information table C_PBIT; Fig. 29, the cell playback information table includes

C_FVOBU_SA and C_ILVU_EA values for each entry; column 17, lines 11-13 and 23-

29, the C_FVOBU_SA and C_ILVU_EA values indicate start and end addresses for

cells in the program chain for playing back the cells), the clip information file, the playlist

file and the stream file being logically separate (Kaneshige: Fig. 26, the video title set is

divided into sections, wherein the video title set information section VTSI is separate

from the video object set VTSTT_VOBS and the video title set information section VTSI

is further divided into sections which include a video title set cell address table

VTS_C_ADT separate from a video title set program chain information table

VTS_PGCIT).

Re **claim 2**, Kaneshige discloses that the stream files are interleaved

(Kaneshige: Figs. 9A and 9B).

Re **claim 3**, Kaneshige discloses that the stream files associated with particular

reproduction path are interleaved between the stream files associated with common

reproduction path portions (Kaneshige: Figs. 9A and 9B).

Claim 12 is the corresponding recording method implemented by the apparatus

and computer readable medium of claim 1, and, therefore, has been analyzed and

rejected with respect to claim 1 above.

Claim 13 is the corresponding reproducing method implemented by the

apparatus and computer readable medium of claim 1, and, therefore, has been

analyzed and rejected with respect to claim 1 above.

Re **claim 14**, Kaneshige discloses an apparatus for recording a data structure for

managing reproduction of video data having at least one reproduction path video data

on a recording medium, comprising: an optical recording unit configured to record data

on the recording medium (Kaneshige: Fig. 14, pickup driver 104); an encoder

configured to encode at least video data having at least one reproduction path

(Kaneshige: column 4, lines 23-52); and a controller, coupled to the optical recording

unit, configured to control the optical recording unit to record stream files output from

the encoder in a data area of the recording medium (Kaneshige: Fig. 14, system

controller 204), each stream file including video data (Kaneshige: Fig. 26, _video_ object

set for video title set menu VTSTT_VOBS), each stream file associated with one of a

portion common to the reproduction paths and a particular reproduction path among the

reproduction paths (Kaneshige: column 4, lines 23-52; Figs. 9A and 9B); the controller

configured to the optical recording unit to record a playlist file in a playlist area of the

recording medium, the playlist file for identifyingthe common reproduction path portions

and the particular reproduction path portions to reproduce (Kaneshige: Figs. 26 and 28,

program chain information PGCI; column 16, lines 21-33); and the controller configured

to control the optical recording unit to record management information for managing

reproduction of the video data in clip information files, the clip information files being

recorded in a clip information area of the recording medium (Kaneshige: Fig. 26, video

title set information section VTSI is further divided into sections which include a video

title set cell address table VTS_C_ADT), each one of the clip information files being

associated with a corresponding stream file (Kaneshige: column 15, lines 60-61, the

video title set cell address table VTS_C_ADT is a video title set cell address table, in

which cell address information is described; column 16, lines 28-30, since the program

chain controls playback by mapping the cells to be played in a program, the cell

addresses described by the video title set cell address table VTS_C_ADT correspond to

each stream file (i.e., cell) in the program), each clip information file for providing a map

for the associated stream file (Kaneshige: column 15, lines 60-61, the video title set cell

address table VTS_C_ADT is a video title set cell address table, in which cell address

information is described; column 16, lines 23-27, the program chain utilizes cell

addresses for controlling playback), each map for mapping presentation time

information to address information for the associated stream file (Kaneshige: Fig. 28;

column 16, line 21, through column 17, line 13; Fig. 28, cell playback information table

C_PBIT; Fig. 29, the cell playback information table includes C_FVOBU_SA and

C_ILVU_EA values for each entry; column 17, lines 11-13 and 23-29, the

C_FVOBU_SA and C_ILVU_EA values indicate start and end addresses for cells in the

program chain for playing back the cells), the clip information file, the playlist file, and

the stream file being logically separate (Kaneshige: Fig. 26, the video title set is divided

into sections, wherein the video title set information section VTSI is separate from the

video object set VTSTT_VOBS and the video title set information section VTSI is further

divided into sections which include a video title set cell address table VTS_C_ADT

separate from a video title set program chain information table VTS_PGCIT).

Re **claim 15**, Kaneshige discloses an apparatus for reproducing a data structure

for managing reproduction of video data having at least one reproduction path recorded

on a recording medium, comprising: an optical reproducing unit configured to reproduce

data recorded on the recording medium (Kaneshige: Fig. 14, pickup driver 104); a

controller, coupled to the optical reproducing unit (Kaneshige: Fig. 14, system controller

204), configured to control the optical reproducing unit to reproduce stream files from

the recording medium (Kaneshige: column 4, lines 23-52), each stream file including

video data (Kaneshige: Fig. 26, _video_ object set for video title set menu VTSTT_VOBS),

each stream file associated with one of a portion common to the reproduction paths and

a particular reproduction path among the reproduction paths (Kaneshige: column 4,

lines 23-52; Figs. 9A and 9B); the controller configured to the optical recording unit to

reproduce a playlist file from a playlist area of the recording medium, the playlist file for

identifying the common reproduction path portions and the particular reproduction path

to reproduce (Kaneshige: Figs. 26 and 28, program chain information PGCI; column 16,

lines 21-33); and the controller configured to control the optical reproducing unit to

reproduce management information for managing reproduction of the video data from

clip information files, the clip information files recorded in a clip information area of the

recording medium (Kaneshige: Fig. 26, video title set information section VTSI is further

divided into sections which include a video title set cell address table VTS_C_ADT),

each one of the clip information files being associated with a corresponding stream file

(Kaneshige: column 15, lines 60-61, the video title set cell address table VTS_C_ADT is

a video title set cell address table, in which cell address information is described;

column 16, lines 28-30, since the program chain controls playback by mapping the cells

to be played in a program, the cell addresses described by the video title set cell

address table VTS_C_ADT correspond to each stream file (i.e., cell) in the program),

each clip information file for providing a map for the associated stream file (Kaneshige:

Fig. 28; column 16, lines 21-27), each map for mapping presentation time information to

address information for the associated stream file (Kaneshige: Fig. 28; column 16, line

21, through column 17, line 13; Fig. 28, cell playback information table C_PBIT; Fig. 29,

the cell playback information table includes C_FVOBU_SA and C_ILVU_EA values for

each entry; column 17, lines 11-13 and 23-29, the C_FVOBU_SA and C_ILVU_EA

values indicate start and end addresses for cells in the program chain for playing back

the cells), the clip information file, the playlist file, and the stream file being logically

separate (Kaneshige: Fig. 26, the video title set is divided into sections, wherein the

video title set information section VTSI is separate from the video object set

VTSTT_VOBS and the video title set information section VTSI is further divided into

sections which include a video title set cell address table VTS_C_ADT separate from a

video title set program chain information table VTS_PGCIT).

Re **claim 16**, Kaneshige discloses that only one stream file is associated with each particular portion representing a same time period of the video data stream (Kaneshige: Figs. 3B and 6; column 7, lines 48-57).

Re **claim 17**, Kaneshige discloses that the video data stream is represented by packets (Kaneshige: Fig. 31); and each map maps presentation time stamps to packet addresses (Kaneshige: Fig. 28; column 17, lines 7-13, the presentation order correlates to entry points).

Claim 18 has been analyzed and rejected with respect to claim 17 above.

Claim 19 has been analyzed and rejected with respect to claim 3 above.

Claim 22 has been analyzed and rejected with respect to claim 3 above.

Claim 25 has been analyzed and rejected with respect to claim 3 above.

Claim 28 has been analyzed and rejected with respect to claim 3 above.

Re **claim 32**, Kaneshige discloses that the playlist file includes at least one indicator for indicating a reproduction order of the common and particular reproduction path (Kaneshige: column 16, lines 21-27).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

8.   **Claims 4-11, 20, 21, 23, 24, 26, 27, 29, and 30 are rejected under 35 U.S.C.**

103(a) as being unpatentable over Kaneshige et al. (US 6360055 B1) in view of

Inoshita et al. (US 7024102 B1).

Re **claim 4**, Kaneshige discloses a majority of the features of claim 4 as

discussed above concerning claims 1 and 2, but does not specifically disclose that the

stream files have a size to prevent a reproducing apparatus buffer from under-flowing

during reproduction of the stream files. However, Inoshita discloses an image data

reproducing apparatus in which image data is reproduced from a computer readable

medium, which stores multiple camera angles (Inoshita: Fig. 9) wherein all video objects

are the same size (Inoshita: column 10, lines 52-56) and a buffer is managed to prevent

either overflow or underflow (Inoshita: column 5, lines 45-54). Since both Kaneshige

and Inoshita relate to reproducing image data stored on a disc, where the video objects

(or cells) are interleaved from multiple camera angles, one of ordinary skill in the art at

the time of the invention would have found it obvious to combine their teachings in order

to reproduce multiple camera angles simultaneously for enhanced viewing (Inoshita:

column 2, lines 27-32). The apparatus of Kaneshige, now implemented in conjunction

with the apparatus of Inoshita, has all of the features of claim 4.

Re **claim 5**, arguments analogous to those presented for claim 4 are applicable to claim 5, and, therefore, claim 5 has been analyzed and rejected with respect to claim 4 above.

Re **claim 6**, the apparatus of Kaneshige, now implemented in conjunction with the apparatus of Inoshita, discloses that more than one stream file is associated with a same one of a common reproduction path portion and a particular reproduction path when the one of the common reproduction path portion and the particular reproduction path includes data exceeding a stream file size to prevent the reproducing apparatus buffer from over-flowing during reproduction of the stream files (Inoshita: column 10, lines 52-56, all of the video object blocks are the same size, so when the alternate angle path exceeds the size of one video object block, the path contains more than one video object block), as in the claim.

Re **claim 7**, arguments analogous to those presented for claim 4 are applicable to claim 7, and, therefore, claim 7 has been analyzed and rejected with respect to claim 4 above.

Re **claim 8**, arguments analogous to those presented for claim 6 are applicable to claim 8, and, therefore, claim 8 has been analyzed and rejected with respect to claim 6 above.

Re **claim 9**, arguments analogous to those presented for claim 4 are applicable to claim 9, and, therefore, claim 9 has been analyzed and rejected with respect to claim 4 above.

Re **claim 10**, arguments analogous to those presented for claim 5 are applicable to claim 10, and, therefore, claim 10 has been analyzed and rejected with respect to claim 5 above.

Re **claim 11**, arguments analogous to those presented for claim 6 are applicable to claim 11, and, therefore, claim 11 has been analyzed and rejected with respect to claim 6 above.

Claim 20 has been analyzed and rejected with respect to claim 5 above.

Claim 21 has been analyzed and rejected with respect to claim 4 above.

Claim 23 has been analyzed and rejected with respect to claim 5 above.

Claim 24 has been analyzed and rejected with respect to claim 4 above.

Claim 26 has been analyzed and rejected with respect to claim 5 above.

Claim 27 has been analyzed and rejected with respect to claim 4 above.

Claim 29 has been analyzed and rejected with respect to claim 5 above.

Claim 30 has been analyzed and rejected with respect to claim 4 above.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

    a.   Information processing apparatus and method, recorded medium, and

program

Kato et al. (US 20020150383 A1)

    b.   Apparatus, method, and recording medium implementing audio gap

information for an audio presentation discontinuous period

Okada et al. (US 20020031336 A1)

    c.   Systems and methods with error resilience in enhancement layer

bitstream of scalable video coding

Zhang et al. (US 20020021761 A1)

    d.   Multiangle block reproduction system

Nakai et al. (US 5999698 A)

    e.   Multi-scene recording medium and apparatus for reproducing data

therefrom

Hirayama et al. (US 5732185 A)

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

    A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER FINDLEY whose telephone number is (571)270-1199. The examiner can normally be reached on Monday-Friday (8:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
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